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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Kevin Lauren Cote

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EXAMINER

NGUYEN, PHONG H

ART UNIT

PAPER NUMBER

3724

MAIL DATE

DELIVERY MODE

06/23/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/035,997	Applicant(s) COTE ET AL.	
	Examiner PHONG H. NGUYEN	Art Unit 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 21-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 calls for the transfer element including a lower belt. This is not correct. The claimed book trimming device uses **a side table 44** (Figs. 14-18) or **a lower belt 256** (Fig. 9) to transfer a book from a front trimming station to a side trimming station. Since claim 1 claims the side table, the lower belt cannot be in claim 8. Furthermore, it appears from the disclosure that the transfer element is the upper belt. Claim 8 will be examined as best understood by the Examiner.

The expression "for engaging the sheet material article therebetween" render claim 8 indefinite since the sheet material article engages and is between the upper belt and the side table but not the upper belt and the lower belt.

Regarding claim 9, it appears that the side table is the shuttle mechanism but not the transfer belt. Claim 9 will be examined as best understood by the Examiner.

Claim Rejections - 35 USC § 103

Art Unit: 3724

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8, 10 and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sarring (3,722,336) in view of Kile et al. (3,122,041), hereinafter Kile.

Regarding claim 1, Sarring teaches a transfer apparatus comprising:

a transfer element (1008, 1009, 1010, Fig. 27) configured to grip the sheet material article 24 onto lower belts and move the sheet material article in a transfer direction; and

a driver (see the section of the drive mechanism for belts and Fig. 27) configured to move the transfer element at a same speed as the lower belts during a first time period (at 140° of time through cycle, Fig. 38), the speed of the lower belts and the transfer element varying during the first time period (between 0°-140° of time through cycle, Fig. 38).

Sarring teaches placing the books on lower belts (1290, 1292 & 1294) but not on a side table.

Kile teaches providing a side table B for a book trimmer for sturdily supporting a book. See Fig. 1.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to replace the lower belts of Sarring with a side table as taught by Kile on for sturdily supporting a book.

It is to be noted that when the side table is incorporated into the transferring apparatus, the sheet material article is gripped by the transfer element and the side table is moving in the transfer direction.

Regarding claim 2, the drive is configured to move the sheet material article to a predetermined position (between 0°-140° of time through cycle, Fig. 38) relative to the side table before moving the transfer element at the same speed as the side table (at 140° of time through cycle, Fig. 38).

Regarding claim 3, a side clamp (1430) for gripping the sheet material article is best seen in Fig. 35.

Regarding claim 4, a side trimming operation is performed between 280°-320° of time through cycle. See Fig. 38.

Regarding claim 5, the transfer element has the same speed as a front table 978 at 0°-10° of time through cycle when the transfer element and a front clamp 764 grips the sheet material article. See Figs. 4, 5 and 38.

Regarding claim 6, the transfer element has the same speed as a receiving conveyor (1361, 1334 & 1360) to move the sheet material article from the side table to the receiving conveyor. See Fig. 33.

Regarding claims 7 and 8, continuous belts (upper belt 1010) are best seen in Fig. 33.

Regarding claim 10, Sarring teaches an epicycle gear unit 1392 driven by a main trimmer drive (a main gear that drives wheels 1421 and extension shaft 1390) comprising a constant input member (as evidenced by a constant rotational speed of sprocket 1421 to

provide a constant speed for a delivery table 1410) and a variable input member for varying the speed of the transfer element.

Regarding claim 21, the transfer element and the side table have the same speed at 140° of time through cycle. See Fig. 38.

Regarding claim 22, a first time period of reciprocating motion of the side table is from 0°-360° which is within the claimed 130° of the time through cycle. See Fig. 38.

Regarding claim 23, a curved velocity profile of the transfer element is best seen in Fig. 38.

Regarding claim 24, the transfer element increases speed at 140° of time through cycle and reduces speed right after 220° of time through cycle. See Fig. 38.

Regarding claim 25, Sarring teaches a transfer apparatus comprising:

a transfer element (1008, 1009, 1010, Fig. 27) configured to grip the sheet material article 24 and move the sheet material article in a transfer direction; and

a driver (see the section of the drive mechanism for belts and Fig. 27) configured to move the transfer element at a same speed as the lower belts during a first time period (at 140° of time through cycle, Fig. 38), the speed of the lower belts and the transfer element varying during the first time period (between 0°-140° of time through cycle, Fig. 38).

Sarring teaches placing the books on lower belts (1290, 1292 & 1294) but not on a side table.

Kile teaches providing a side table B for a book trimmer for sturdily supporting a book. See Fig. 1.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to replace the lower belts of Sarring with a side table as taught by Kile on for sturdily supporting a book.

It is to be noted that when the side table is incorporated into the transferring apparatus, the sheet material article is gripped by the transfer element and the side table is moving in the transfer direction.

Regarding claim 9, the side table in the combination of Sarring and Kile goes back and forth to receive the sheet material. Therefore, the transfer element in the combination of Sarring and Kile is considered a shuttle mechanism.

Regarding claim 10, to the degree that it can be argued that the gear unit 1392 in Sarring is not an epicycle gear unit, it would have been obvious to one skilled in the art to replace the gear unit 1392 with an epicycle gear unit as explained below.

The gear unit 1392 in Sarring is used for varying the speed of conveyor belts. AAPA teaches using an epicyclical gear unit for changing speed of conveyor belts being well known in the art. See paragraph [102]. Therefore, Sarring's gear unit 1392 and an epicycle gear unit are art equivalents known for being used to change the speed of the conveyor belts.

Since it has been held that substituting equivalents known for the same purpose is obvious to one skilled in the art, it would have been obvious to one skilled in the art to replace the gear unit 1392 with an epicycle gear unit for varying speed of the conveyor belts. See MPEP. 2144.06.

Regarding claim 11, Sarring teaches using the gear unit 1392 for varying speed of the transfer element. AAPA teaches using a servomotor for varying speed of a transferring element being well known in the art. See paragraph [102]. Therefore, Sarring's gear unit 1392 and a servomotor are art equivalents known for being used to change speed of a transfer element.

Since it has been held that substituting equivalents known for the same purpose is obvious to one skilled in the art, it would have been obvious to one skilled in the art to replace the gear unit 1392 with a servomotor for varying speed of the transfer element. See MPEP. 2144.06.

Regarding claim 25, to the degree that it can be argued that the gear unit 1392 in Sarring is not an epicycle gear unit, claim 25 is rejected as follows:

Sarring teaches a transfer apparatus comprising:

a transfer element (1008, 1009, 1010, Fig. 27) configured to grip the sheet material article 24 and move the sheet material article in a transfer direction; and

a driver (see the section of the drive mechanism for belts and Fig. 27) configured to move the transfer element at a same speed as the lower belts during a first time period (at 140° of time through cycle, Fig. 38), the speed of the lower belts and the transfer element varying during the first time period (between 0°-140° of time through cycle, Fig. 38).

Sarring teaches placing the books on lower belts (1290, 1292 & 1294) but not on a side table.

Kile teaches providing a side table B for a book trimmer for sturdily supporting a book. See Fig. 1.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to replace the lower belts of Sarring with a side table as taught by Kile on for sturdily supporting a book.

It is to be noted that when the side table is incorporated into the transferring apparatus, the sheet material article is gripped by the transfer element and the side table is moving in the transfer direction.

Sarring teaches using the gear unit 1392 but not an epicycle gear unit for varying the speed of conveyor belts. AAPA teaches using an epicycle gear unit for changing speed of conveyor belts being well known in the art. See paragraph [102]. Therefore, Sarring's gear unit 1392 and an epicycle gear unit are art equivalents known for being used to change the speed of the conveyor belts.

Since it has been held that substituting equivalents known for the same purpose is obvious to one skilled in the art, it would have been obvious to one skilled in the art to replace the gear unit 1392 with an epicycle gear unit for varying speed of the conveyor belts. See MPEP. 2144.06.

Response to Arguments

5. Applicant's arguments filed 06/08/2010 have been fully considered but they are not persuasive.

Regarding claim 1, the Applicant argues that replacing the lower belts in Sarring with the table in Kile would make the book trimming device inoperable for its intended purpose. This argument is not persuasive. After the first book is trimmed at the front trimming station, it is transferred to the table B as modified by Kile to be moved to the side trimming station. The first book is transferred with variable speed as taught by Sarring. It is to be noted that Kile also teaches the table B moving with variable speed. After the first book is trimmed at the side trimming station, it is moved out of the side trimming station and the empty table B returns to the front trimming station for picking up the second book. Since there is not any book on the table B, the returning trip of the table B does not interfere the continuous rotation of the upper belts.

The Applicant the combination of Sarring and Kile does not teach gripping the sheet material (by upper belts in Sarring) and moving the sheet material in a transfer direction onto the moving side table B (in Kile). This argument is not persuasive. When the upper belts descent (see col. 42, lines 55-60 in Sarring), they press the book against the table B. Therefore, the combination of Sarring and Kile teaches gripping and moving the sheet material in the transfer direction.

Regarding claim 8, there is a 35 USC 112 issue with respect to the claim. It appears that the continuous belt being an upper belt but not a lower belt. The side table in claim 1 is used to carry book. Therefore, the lower belt cannot be claimed in claim 8 since the lower belt and the side table are two mutual exclusive components in the trimming device.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHONG H. NGUYEN whose telephone number is (571)272-4510. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Phong H Nguyen/
Examiner, Art Unit 3724
June 20, 2010